Index of Claims

| App | lication | /Control | No. |
|-----|----------|----------|-----|

10/665,453

Examiner

G. Nagesh Rao

Applicant(s)/Patent under Reexamination

HAMRICK ET AL.

Art Unit

1722

Rejected Allowed

(Through numeral) Cancelled

Restricted

Non-Elected N Interference

Appeal Α 0

Objected

|              | l  | L        | _ |          |          |              |  |  |  |          |                 |
|--------------|--|----------|---|----------|----------|--------------|--|--|--|----------|-----------------|
| Cla          | Date   |          |   |          |          |              |  |  |  |          |                 |
| Claim        |  |          | 1 |          |          |              | - 416  | $\overline{}$                                    | $\neg$   | $\neg$   | $\sqcap$        |
| Final        | Original   |          |   |          |          |              |  |  |  |          |                 |
|              |  | L        |   |          |          | L            |  |  |  |          | Ш               |
|              | 1  | 7        | 4 |          |          |              | _  | _  |  |          | $\vdash$        |
|              | 2  | Н        | 4 |          | <u> </u> | ļ            |  | -  | _  |          | Н               |
|              | 3  | Ц        | Н | -        |          |              |  |  |  |          | Н               |
|              | 4  | H        | H | _        | $\vdash$ | -            |  |  |  |          | $\vdash$        |
|              | 1<br>2<br>3<br>4<br>5<br>6   | -        | ╢ |          | ┝        | -            | _  | -  | $\vdash$   |          | Н               |
|              | 7  | ┝        | 1 | -        | $\vdash$ |              | -  |  |  | _        | Н               |
|              | <u> </u>   | $\vdash$ | f |          | -        | -            |  | _  |  |          | Н               |
|              | 8<br>9   | $\vdash$ | H |          | ┝        | _            |  | -  |  | _        | H               |
| -            | 10   |          | Н |          | $\vdash$ |              |  | <del>_</del>                                     |  |          | Н               |
|              | 11   | Н        | H |          | _        |              |  |  |  |          | $\vdash$        |
|              | 12   | _        | H |          | Г        | $\vdash$     |  | $\Box$   |  |          | П               |
|              | 11<br>12<br>13   | Г        | Ħ |          |          | Т            |  |  |  |          | П               |
|              | 14   |          |   |          | L        |              |  |  |  |          |                 |
|              | 14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24<br>25<br>26<br>27<br>28 |          |   |          |          |              |  |  |  |          | Ц               |
|              | 16   | Ц        | Ц |          | _        | <u></u>      | _  | <u> </u>   |  |          | Ш               |
|              | 17   | Ц        | Ц |          | <u> </u> | <u> </u>     | <u> </u>   | _  | _  | _        | Н               |
|              | 18   | Н        | Ц |          | ⊢        | <u> </u>     | _  |  | H  | <u> </u> | Н               |
|              | 19   | Н        | Н | -        | ├        |              | ⊢  | -  | -  | -        | Н               |
| -            | 20   | Н        | Н |          | $\vdash$ |              | ⊢  |  | -  | ┝        | H               |
|              | 22   | Н        |   |          | $\vdash$ |              | ┢  | ├  | <del> </del>                                     | $\vdash$ | Н               |
| <b></b>      | 23   | Н        | Н | _        | -        | -            | -  | ┢  |  |          | H               |
| -            | 24   | Н        | П |          | T        | $\vdash$     | <del>                                     </del> | <del>                                     </del> |  |          | П               |
|              | 25   | П        |   |          | Г        |              | Г  | _  | -  |          | П               |
|              | 26   |          |   |          |          |              |  |  |  |          |                 |
|              | 27   |          |   |          |          |              |  |  |  |          |                 |
|              | 28   | Ц        |   |          |          | L            | _  |  |  | _        | Ш               |
|              | 29   | Ц        |   |          | _        | <u></u>      | _  | <u> </u>   | <u> </u>   | _        | Ш               |
|              | 30   | Ţ        | A | <u> </u> | <u> </u> | <u> </u>     | _  | _  | _  | <u> </u> | Н               |
| <u> </u>     | 30<br>31<br>32   | -        |   | _        | _        | <u> </u>     | <u> </u>   | _  | ļ  |          | Н               |
| <u> </u>     | 32   | 1        | 1 | _        | $\vdash$ | ╁            | $\vdash$   | -  | ├-   | <u> </u> | Н               |
| <del> </del> | 33<br>34   | 1        | _ | $\vdash$ | $\vdash$ | ┢            | -  | ├-   | -  | <u> </u> | Н               |
| $\vdash$     | 35   | Н        | _ | -        |          | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$ | $\forall$       |
| <del></del>  | 36   | Ħ        | _ | Н        | T        | t            |  | $\vdash$   | T  | Г        | П               |
|              | 37   | Ħ        |   |          | П        | T            | Г  | Π  | Π  |          | П               |
|              | 38<br>39   |          |   |          |          |              |  |  |  |          |                 |
|              |  | $\prod$  |   |          |          | Ľ            |  |  |  |          | П               |
|              | 40   | Ц        |   |          |          |              | $\Box$   | L  |  |          | Ш               |
| <u> </u>     | 41   | Ц        |   | _        | $\vdash$ |              | <u> </u>   | <u> </u>   | <u> </u>   | <u> </u> | $\sqcup$        |
|              | 42   | H        | _ | $\vdash$ | -        | $\vdash$     | <u> </u>   | $\vdash$   | -  | -        | $\vdash \vdash$ |
| ļ            | 43   | H        | _ | -        | $\vdash$ | $\vdash$     | -  | <u> </u>   | -  | $\vdash$ | $\vdash$        |
| $\vdash$     | 45   | Н        | _ | ┝        | ┝        | <del> </del> | <del> -</del>                                    | ⊢  | -  | -        | $\vdash$        |
| -            | 46   | Н        | - | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$   | ╁  | $\vdash$   | $\vdash$ | $\vdash$        |
|              | 47   | Н        | - | $\vdash$ | $\vdash$ | ╁            | $\vdash$   | T  | -  | $\vdash$ | Н               |
|              | 48   | Ħ        |   |          |          | T            |  | $\vdash$   | <del>                                     </del> | Т        | $\sqcap$        |
|              | 49   | П        |   |          |          | Ι            |  |  |  |          |                 |
|              | 50   | 1        | 7 |          |          |              |  |  |  |          |                 |

| E         E | Claim    |     | Date           |           |                  |          |              |                |  |          |  |
|---|----------|-----|----------------|-----------|------------------|----------|--------------|----------------|--|----------|--|
| 51       N         52       V         53       S         54       S         55       S         56       S         57       S         58       S         59       S         60       S         61       S         62       S         63       S         64       S         67       S         68       S         69       S         70       S         71       S         76       S         77       S         78       S         79       S         80       S         81       S         86       S         87       S         88       S         99       S         90       S         91       S         92       S         93       S         94       S         95       S         96       S         97       S         98 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>  |          |     |                |           |                  |          |              |                |  |          |  |
| 52       N         53       S         54       S         55       S         56       S         57       S         58       S         59       S         60       S         61       S         62       S         63       S         64       S         65       S         68       S         69       S         70       S         71       S         75       S         76       S         77       S         80       S         81       S         82       S         83       S         84       S         85       S         86       S         87       S         88       S         99       S         99       S         99       S         99       S   |          |     | N              | -         | -                | -        | _            |                | -  | _        |  |
| 53       54         55       56         57       58         59       60         61       62         63       64         65       66         67       68         69       70         71       72         73       74         75       76         77       78         79       80         81       82         83       84         85       86         87       88         89       90         91       92         93       94         95       96         97       98         99  | _        | 52  | ÿ              |           | $\vdash$         | -        |              |                |  | _        |  |
| 54       55         56       57         58       59         60       61         61       62         63       64         65       66         67       68         69       70         71       72         73       74         75       76         77       78         79       80         81       82         83       84         85       86         87       88         89       90         91       92         93       94         95       96         97       98         99  |          | 53  |                |           |                  |          |              |                |  |          | $\neg$   |
| 57       58         59       60         61       62         63       64         65       66         67       68         69       70         71       72         73       74         75       76         77       78         79       80         81       82         83       84         85       86         87       88         89       90         91       92         93       94         95       96         97       98         99       99   |          | 54  |                |           |                  |          |              |                |  |          |  |
| 57       58         59       60         61       62         63       64         65       66         67       68         69       70         71       72         73       74         75       76         77       78         79       80         81       82         83       84         85       86         87       88         89       90         91       92         93       94         95       96         97       98         99       99   |          | 55  |                | _         |                  |          |              |                |  |          |  |
| 59       60         61       62         63       64         65       66         67       68         69       70         71       72         73       74         75       76         77       78         79       80         81       82         83       84         85       86         87       88         89       90         91       92         93       94         95       96         97       98         99       99   |          | 56  |                |           |                  |          |              |                |  |          |  |
| 59       60         61       62         63       64         65       66         67       68         69       70         71       72         73       74         75       76         77       78         79       80         81       82         83       84         85       86         87       88         89       90         91       92         93       94         95       96         97       98         99       99   |          | 57  |                |           | _                |          |              |                |  |          |  |
| 60 61 61 62 63 64 65 66 66 67 67 68 68 69 70 70 71 71 72 73 73 74 75 76 77 78 78 79 80 81 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 99 99 99 99 99 99 99 99 99 99 99 99  |          | 58  |                |           |                  | _        | _            |                |  |          |  |
| 61 62 63 64 65 66 66 67 67 68 68 69 70 70 71 71 72 73 73 74 74 75 76 77 78 78 79 80 81 81 82 83 83 84 85 86 87 88 89 90 90 91 91 92 93 99 99 99 99 99 99 99 99 99 99 99 99  |          | 59  |                |           | <u> </u>         | -        | L            |                |  |          |  |
| 62  |          | 60  |                |           | ├-               | ⊢        | _            | -              | _  |          |  |
| 63   64   65   66   67   68   69   70   71   72   73   74   75   76   77   78   79   80   81   82   83   84   85   86   87   88   89   90   91   92   93   94   95   96   97   98   99   99   99   99   99   99   |          | 61  | H              | <b></b> - | <del>  -  </del> | ├        | -            | H              |  |          | $\vdash$   |
| 66 67 68 68 69 70 70 71 71 72 73 73 74 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 94 99 99 99 99 99 99 99 99 99 99 99 99   | -        | 63  | H              | -         | -                |          | $\vdash$     |                |  |          | $\vdash$   |
| 66 67 68 68 69 70 70 71 71 72 73 73 74 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 94 99 99 99 99 99 99 99 99 99 99 99 99   |          | 64  |                | $\vdash$  | -                | -        | $\vdash$     |                |  | -        | $\vdash$   |
| 66 67 68 68 69 70 70 71 71 72 73 73 74 75 76 77 78 78 79 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 94 99 99 99 99 99 99 99 99 99 99 99 99   |          | 65  |                | Н         |                  | -        | $\vdash$     |                | $\vdash$   | -        | $\vdash$   |
| 68   69   70   71   72   73   74   75   76   77   77   78   77   78   79   80   81   82   83   84   85   86   87   88   89   90   91   92   93   94   95   96   97   98   99   99   99   99   99   99   | -        | 66  | ┢              | $\vdash$  | $\vdash$         | T        |              |                |  |          | П  |
| 68   69   70   71   72   73   74   75   76   77   77   78   77   78   79   80   81   82   83   84   85   86   87   88   89   90   91   92   93   94   95   96   97   98   99   99   99   99   99   99   |          | 67  |                |           |                  |          |              |                |  |          |  |
| 69  |          | 68  |                |           |                  |          |              |                |  |          |  |
| 70 71 71 72 73 74 75 76 76 77 78 79 80 80 81 82 83 84 85 86 87 88 89 90 91 91 92 93 94 95 96 97 98 98   |          | 69  |                |           |                  |          |              |                |  |          |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   |          | 70  |                |           |                  |          |              |                |  |          |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   |          | 71  |                |           | L                |          | L            | L              |  | _        |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   |          | 72  | L              |           | ╙                | L        | _            | <u> </u>       | _  | <u> </u> |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   |          | 73  | _              |           | L.               | <u> </u> |              |                |  | _        |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   | <u> </u> | 74  | _              | <u> </u>  | <u> </u>         | <u> </u> | <u> </u>     | <u> </u>       |  | <u> </u> |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   | <u> </u> | 75  | <u> </u>       |           | ├                | -        |              | _              | <u> </u>   | ⊢        | _  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   |          | 77  | <u> </u>       |           | -                | ⊢        | ⊢            |                |  | ┝        |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   | -        | 78  | -              | $\vdash$  |                  | ├─       |              | ├              | -  |          |  |
| 80 81 82 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   | -        | 79  | $\vdash$       | -         | -                | $\vdash$ |              | <del> </del>   | $\vdash$   | $\vdash$ | -  |
| 81 82 83 83 84 85 86 87 88 89 90 90 91 91 92 93 93 94 95 96 97 98 99 99   |          | 80  |                | -         | -                | $\vdash$ |              | <del>  -</del> | $\vdash$   | $\vdash$ | <del>                                     </del> |
| 82<br>83<br>84<br>85<br>86<br>87<br>88<br>89<br>90<br>91<br>91<br>92<br>93<br>93<br>94<br>95<br>96<br>97<br>98  |          | 81  | $\vdash$       |           | 一                | $\vdash$ | $\vdash$     |                |  |          | $\vdash$   |
| 85<br>86<br>87<br>88<br>89<br>90<br>91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          | 82  | $\vdash$       |           | $I^-$            | 一        |              |                |  | <u> </u> |  |
| 85<br>86<br>87<br>88<br>89<br>90<br>91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          | 83  | <u> </u>       |           |                  | T        |              | $\overline{}$  |  |          |  |
| 85<br>86<br>87<br>88<br>89<br>90<br>91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          | 84  | Π              |           |                  |          | П            |                |  |          |  |
| 87<br>88<br>89<br>90<br>91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          | 85  | Ι.             |           |                  |          | L.           |                |  |          |  |
| 88 89 90 90 91 92 93 93 94 95 96 97 98 99 99  |          | 86  |                |           |                  |          |              |                |  |          | L  |
| 89<br>90<br>91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  | <u></u>  | 87  | _              | _         | _                | <u> </u> | _            |                | _  | <u> </u> | <u> </u>   |
| 90<br>91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          | 88  | <u> </u>       | <u> </u>  | ┞_               | <u> </u> | _            | <u> </u>       | <u> </u>   |          | _  |
| 91<br>92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          | 89  |                | <u> </u>  | 1_               | ऻ_       | <u> </u>     | <u> </u>       | <u> </u>   | ┡        | -  |
| 92<br>93<br>94<br>95<br>96<br>97<br>98<br>99  |          |     | <del> </del>   | -         | <b>├</b>         | ├        | <del> </del> | ├-             | -  | H        | $\vdash$   |
| 93 94 95 96 97 98 99 99   | -        |     | <del> </del> — | <u> </u>  | $\vdash$         |          | ├-           | <del> </del>   | <del> </del>                                     | $\vdash$ | -  |
| 94 95 96 97 98 99 99  | -        | 92  | $\vdash$       | $\vdash$  | +-               | $\vdash$ | ├            | +-             | $\vdash$   | -        | <del> </del>                                     |
| 95<br>96<br>97<br>98<br>99  | -        | 93  |                | $\vdash$  | ╁                | $\vdash$ | -            | +-             | $\vdash$   | $\vdash$ | ├  |
| 96<br>97<br>98<br>99  | _        | 95  | $\vdash$       | H         | ╁                | $\vdash$ | $\vdash$     | $\vdash$       | $\vdash$   | $\vdash$ | $\vdash$   |
| 97<br>98<br>99  |          | 96  | 1-             | $\vdash$  | ⇈                | $\vdash$ | $\vdash$     | $\vdash$       | $\vdash$   | $\vdash$ | $t^-$  |
| 98 99   |          | 97  | t              | t         | ╆                | 1        | $\vdash$     | Г              | <del>                                     </del> | -        | T  |
| 99  |          |     | t              | t         | 1                | 1        | Т            | Т              |  | Τ        | $\vdash$   |
| 100   |          | 99  | T              | T         | Γ                | Π        |              |                |  |          |  |
|   |          | 100 |                |           | 匚                |          |              |                |  |          |  |

| Claim |  | Date     |          |  |  |                |            |  |                |                 |
|-------|--|----------|----------|--|--|----------------|------------|--|----------------|-----------------|
| Final | Original   |          |          |  |  |                |            |  |                |                 |
|       | 101  |          |          |  |  |                |            |  |                |                 |
|       | 102  |          |          |  |  |                |            |  |                |                 |
|       | 103  |          |          |  |  |                |            |  |                |                 |
|       | 102<br>103<br>104<br>105   |          |          |  |  |                |            |  |                |                 |
|       | 105  |          |          |  |  |                |            |  |                |                 |
|       | 106  |          |          |  |  |                |            |  |                |                 |
|       | 107  |          |          |  |  |                |            |  |                |                 |
|       | 107<br>108   |          |          |  |  |                |            |  |                | Ш               |
|       | 109  |          |          |  | Ŀ  |                |            |  |                |                 |
|       | 110  |          |          |  |  |                |            |  |                | Ш               |
|       | 111  |          |          | _  |  |                |            |  |                |                 |
|       | 111<br>112   |          |          |  | _  |                |            |  |                |                 |
|       | 113<br>114   |          |          |  | <u> </u>   |                |            |  |                | Ш               |
|       | 114  |          |          | <u></u>  | ļ  | _              | _          |  |                | Щ               |
|       | 115  |          | L.       | <u> </u>   | _  | _              | <u> </u>   |  |                | Ш               |
|       | 116  |          |          | <u> </u>   | _  | _              | <u> </u>   |  |                | Н               |
|       | 117  |          |          | L  | _  | _              | _          |  |                | H               |
|       | 118<br>119   | _        |          | <u> </u>   | <u> </u>   |                | -          | <u> </u>   | _              | $\vdash$        |
|       | 119  |          |          | ⊢  | _  |                |            | _  | -              | -               |
|       | 120  | _        | <u> </u> | _  | <u> </u>   | -              | -          | ⊢  | -              | -               |
|       | 121  |          | _        | <u> </u>   | ⊢  | -              | $\vdash$   | $\vdash$   | -              | $\vdash$        |
|       | 122  | -        | ┝        | _  | -  | ⊢              | $\vdash$   |  | ├—             | Н               |
|       | 123  | -        | <u> </u> | -  | -  | -              | ┢          | -  | -              | $\vdash$        |
|       | 124  |          | -        | <del> </del>                                     | ⊢  | ├-             | ├─         | ┝  | -              | -               |
|       | 121<br>122<br>123<br>124<br>125<br>126<br>127<br>128<br>129<br>130 | -        | ┢        | $\vdash$   | -  | -              | $\vdash$   | ⊢  | -              | $\vdash$        |
|       | 127  | -        |          | $\vdash$   | <del> </del>                                     | ├              | H          | $\vdash$   | -              |                 |
|       | 128  |          |          | $\vdash$   | $\vdash$   |                | ╌          | $\vdash$   | $\vdash$       | $\vdash \vdash$ |
|       | 129  |          |          | <del>                                     </del> | <del>                                     </del> | T              | Т          | _  |                | П               |
|       | 130  | $\vdash$ |          | ┢  |  |                |            | $\vdash$   | $\vdash$       | П               |
|       | 131  | -        |          |  | -  | $\vdash$       | Т          | $\vdash$   | _              | П               |
|       | 132  | Г        | _        | <u> </u>   | T  |                | $\vdash$   | <del>                                     </del> |                | П               |
|       | 132<br>133   |          |          | Т  |  |                | Г          | _  |                | П               |
|       | 134  |          |          | 1  |  |                | Г          | _  | Г              | П               |
|       | 135  |          |          |  |  |                |            |  |                |                 |
|       | 135<br>136   |          |          |  |  |                |            |  |                |                 |
|       | 137  | Ĺ        |          |  |  |                |            |  |                |                 |
|       | 138  |          |          |  |  |                |            |  |                |                 |
|       | 139  |          |          |  |  |                |            |  |                |                 |
|       | 140  |          |          |  |  |                |            | _  |                | Ш               |
|       | 141  | <u> </u> |          |  | _  |                | _          | L  | _              | Ш               |
|       | 142  | <u> </u> | _        |  | <u> </u>   | 1_             | <u> </u>   | <u> </u>   | <u> </u>       | Ш               |
|       | 143  |          | _        | <u> </u>   | <u> </u>   | <u> </u>       | Ļ          | <u> </u>   | _              |                 |
|       | 144  |          |          | <u> </u>   | <u> </u>   | <u> </u>       | <u> </u>   | <u> </u>   | <u> </u>       | $\sqcup$        |
|       | 145  | L        | <u> </u> | <u> </u>   | <u> </u>   | <del> </del> _ | <b> </b> _ | _  | _              | <u> </u>        |
|       | 146  |          |          | <u> </u>   | ┞  | <u> </u> _     |            | <u> </u>   | <del> </del> _ | <u> </u>        |
|       | 147  | <u> </u> | <b> </b> | <u> </u>   | <del> -</del> -                                  | 1              | ⊢          | <u> </u>   | $\vdash$       | _               |
|       | 148  | <u> </u> | <u> </u> | ├-   | ├-   | ₩              | -          | -  | <del> </del>   | ļ               |
|       | 149  | <u> </u> | <u> </u> | <u> </u>   | -  | ₩              | ├-         | $\vdash$   | -              | $\vdash$        |
|       | 150  | <u> </u> | <u></u>  | <u></u>  | <u> </u>   | <u></u>        | Ц_         | L.,  | <u> </u>       |                 |
|       |  |          |          |  |  |                |            |  |                |                 |